

Name of the Invention: Manufacture method and structure of a Nonvolatile Memory.

4. Abstract

The manufacturing method of a nonvolatile memory and its structure is achieved by building a gate dielectric layer on a base. The gate dielectric layer contains at least two layers of different material layers. At least one hetero element is planted on the top of the gate dielectric layer so as to increase the electronic trap density. Then rebuild a new top material after removing the upmost layer of material. Finally, build a gate electrode layer on the gate dielectric layer and form source / drain electrodes at the bases of both sides of the gate dielectric layer. In this invention, with the planting of the hetero element, it will form traps in the gate dielectric layer that can catch electrons more easily. Thus, the electrons won't combine together with the increase of operation time. The storage time can be effectively extended and the problem of the combination of bites can be solved.

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